

## Four Models of Sharing Economy Platforms

*Sharing economy platforms combine organizational and market mechanisms in innovative ways to gain competitive advantages over incumbents. These mechanisms are combined on two key dimensions: tight or loose control over participants, and high or low rivalry between participants. We call the resulting four sharing economy models “Franchiser,” “Principal,” “Chaperone” and “Gardener.” Each model focuses on a different value proposition and strategic intent, but they all exploit the growing fluidity of organizational boundaries. Understanding the sharing economy in these terms enables businesses to identify, and respond to, the threats and opportunities provided by sharing economy platforms. The lessons learned from our research will help businesses to engage with the sharing economy.<sup>1,2</sup>*

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### Introducing the Four Sharing Economy Models

In less than a decade, sharing economy platforms have fostered competition and redefined industry boundaries in a range of businesses. Two sharing economy pioneers—Uber and Airbnb—are now well-known global giants and leading players in the sector, which is estimated to reach \$335 billion by 2025.<sup>3</sup> At the other end of the spectrum are small startups focusing on different niches; several hundreds of sharing economy startups were founded in Europe in 2016 alone.<sup>4</sup> In between are platforms of varying sizes, offering a wide range of services. Examples include BlaBlaCar, a long-distance carpooling service that matches drivers with passengers who have the same travel destination; BeWelcome, an open source hospitality community that matches travelers on a budget with members willing to host them for free; and TaskRabbit, a per-task hiring platform that matches skilled workers with clients paying for one-time chores.

What distinguishes sharing economy platforms from traditional marketplaces, supplier networks, third-party intermediaries, service integrators and such, is the way they combine



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<sup>3</sup> Marchi, A. and Parekh, E-J. “How the sharing economy can make its case,” *McKinsey Quarterly*, December 2015, available at <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-the-sharing-economy-can-make-its-case>.

<sup>4</sup> Vaughan, R. and Daverio, R. *Assessing the size and presence of the collaborative economy in Europe*, PwC U.K., April 2016.

organizational and market mechanisms to coordinate platform participation and, ultimately, to create value. In our research, we identified four distinct combinations, or models, which we call *Franchiser*, *Principal*, *Chaperone* and *Gardener*. (Our research methodology is described in the Appendix.) Each model is classified along two dimensions—the level of control exerted by the platform owner over platform participants (loose vs. tight) and the intensity of rivalry<sup>5</sup> among the platform participants fostered by the platform owner (low vs. high). The four models can therefore be depicted as the cells of a 2x2 matrix (see Figure 1). While the control dimension is managed by extending organizational coordination mechanisms into the platform’s user base, the rivalry dimension is managed by the market coordination mechanism designed by the platform owner.

The right-hand side of the figure is inhabited by *Franchisers*, such as Uber, and *Principals*, such as Handy, both of whom exert tight control over platform participants (by, for instance, standardizing procedures and issuing contracts). They differ from one another in that *Franchisers*

foster high rivalry among the participants (by prescribing the price for the service based on real-time changes in supply and demand), while *Principals* foster low rivalry (by charging standard prices for the services purchased). On the left-hand side of the figure are *Chaperones*, such as Airbnb, which also foster high rivalry (by recommending the price for the service based on real-time changes in supply and demand), and *Gardeners*, such as Couchsurfing, which foster low rivalry among platform participants (by, for instance, allowing them only to barter for a share in the costs of the service or only to exchange gifts). What *Chaperones* and *Gardeners* have in common is that they both exert loose control over platform participants (by, for instance, rewarding socially acceptable behavior and setting social norms and community values).

Perceiving the sharing economy through the lens of these four models provides two advantages. First, organizational and market coordination mechanisms are well-known tools among managers and academics, and explaining the sharing economy in these terms helps to demystify the hype surrounding it. Indeed, sharing economy platforms are not actually revolutionary. They are innovative only in that they use old mechanisms in new and “platformed” ways.

On closer scrutiny, most sharing economy platforms are, in fact, running quite traditional

<sup>5</sup> We use the term “rivalry” to describe the relationships among the participants as they may or may not vie for service provision and compete for excess profits. Hence, we do not use the term in the sense of industry rivalry, as used by Porter (1980, 1985) in his five forces analysis, which is determined by industry conditions such as number and size of competitors, fixed costs, product homogeneity, switching costs and others.

Figure 1: Four Sharing Economy Models

Rivalry Between Platform Participants	High	<p><b><i>Chaperones</i></b>                      Prototypical Example:  <b>Airbnb</b></p>	<p><b><i>Franchisers</i></b>                      Prototypical Example:  <b>Uber</b></p>
	Low	<p><b><i>Gardeners</i></b>                      Prototypical Example:  <b>Couchsurfing</b></p>	<p><b><i>Principals</i></b>                      Prototypical Example:  <b>Handy</b></p>
		Loose	Tight
		Control Exerted by Platform Owner	

businesses. Consider the prototypical examples shown in Figure 1 and described in detail later in this article. Handy, a per-task hiring platform, is running a labor leasing agency. Uber, a ridesharing platform, is essentially a taxi dispatcher. Airbnb, a private accommodation sharing platform, is a short-term rental agency. Only Couchsurfing, a platform that facilitates members staying for free at each other's homes, is (relatively speaking) a novelty. It has received a lot of support from online volunteers who were, similar to Wikipedia and Open Source Software, involved in software coding and governance during the early days of the platform.

Second, and more importantly, as the sharing economy changes the competitive landscape in a wide and increasing range of industries, all businesses need to understand the characteristics of the sharing economy and respond to them strategically. Doing this will help them to compete in the digital economy or even embed some of the characteristics into their own business models. This is not to say that we advocate the “Uber-ization of everything.”<sup>6</sup> To imitate Uber's business model makes sense only with a strategy aimed at lowering costs and increasing efficiencies; with other strategies, such as product or service differentiation, “Uber-ization” may result in a firm cannibalizing its own business. As we explain in this article, the *Franchiser* model, typified by Uber, is only one possibility. The other three models introduced above align with different business strategies and, therefore, can be better options for competing in or against the sharing economy.

Sharing economy platforms do not gain their competitive advantages because of what they are doing but *how* they are doing it. Traditionally, organizational boundaries are very rigid, strictly demarcating the internal workings of an organization from the external environment (e.g., insourcing from outsourcing, or employees from customers). In the digital economy, these boundaries are becoming increasingly fluid, and sharing economy platforms exploit this fluidity as a strategic asset that gives them considerable competitive advantages. Indeed, boundary fluidity has made it much easier to coordinate and collaborate without having to create a formal

organization. In short, it has become relatively easy to organize outside of formal organizations, which allows sharing economy platforms to use a range of mechanisms to coordinate platform participation in novel ways. Our four sharing economy models represent different options for exploiting boundary fluidity and thus gaining a competitive advantage. The models provide a useful framework not only for analyzing sharing economy platforms and understanding their strategic positioning, but also for thinking strategically about one's own competitive positioning—be it competing *in* the sharing economy or *against* the sharing economy.

## Characteristics of Sharing Economy Platforms

Neither the sharing economy as such nor its key attributes (see Box 1) are radically new. However, the diffusion of digital technologies, particularly the Internet and smart phones, has enabled sharing economy platforms to become sufficiently scalable to generate a critical mass of users. Typically for a fee, businesses operating such platforms act as intermediaries, matchmakers or gatekeepers. In doing so, they mitigate risks, build trust among the participants and lower the costs of transacting for their user bases.

For instance, Lyft matches people in need of a ride with drivers willing to drive them in their privately owned cars. The transaction between the two parties is intermediated by Lyft for a fee and, in return, Lyft screens the drivers and their cars, operates the peer-reviewing system of riders and drivers, and ensures that all platform participants follow a code of conduct. Sophisticated match-making algorithms lower search costs by making it easy to connect drivers and riders. Likewise, Lyft's peer-reputation system, where drivers and riders rate each other, lowers the barriers for transactions.

Sharing economy platforms are quintessential examples of two-sided markets or multi-sided

6 Patel, S. *In Defense of the Uber-ization of Everything*, TechCrunch, June 19, 2016, available at <https://techcrunch.com/2016/06/19/in-defense-of-the-uber-ization-of-everything/>.

### Box 1: Key Attributes of the Sharing Economy

The term “sharing economy” refers to the confluence of three broader socio-economic developments:

1. **Access over ownership.** Consumer attitudes and behaviors are increasingly shifting from hyper-consumerism and the primacy of buying goods toward buying access to goods and “servitized” products (e.g., streaming movies on Netflix rather than buying DVDs, relying on Uber rather than buying a car). This development is also called access-based consumption<sup>7</sup> or the on-demand economy.
2. **Peer-to-peer.** Internet-based networks and platforms increasingly mediate interactions and transactions among peers typically coordinated by trust relationships and personal reputation (e.g., buying second-hand goods on eBay). This development is also called the peer-to-peer economy.
3. **Allocation of idle resources.** More and more private individuals participate casually in economic activities by resorting to privately owned resources (both assets and labor), which would otherwise remain idle (e.g., renting out private, unused storage space on ShareMyStorage). This development is sometimes called collaborative consumption.<sup>8</sup>

platforms (MSPs).<sup>9</sup> Characteristically, the business models of MSPs are not centered on classic notions of a product or a firm but rather on facilitating interactions between two or more parties—i.e., parties on one side of the platform supply what parties on the other side demand. eBay, for instance, does not produce or sell goods but connects people who have something to sell (the supply side) with people who may be interested in buying (the demand side). In fact, the term “eBay” typically means the platform consisting of eBay users (both supply and demand sides) and eBay, Inc. The former are casual sellers and buyers on either side of the platform; the latter is the formal company and platform owner that operates the platform and charges a commission fee for every transaction between the users on the two sides.

For the most part, the architecture of sharing economy platforms follows the logic of MSPs.<sup>10</sup> However, in comparison to other MSPs, such as eBay, sharing economy platforms do not enable the selling and buying of goods but rather facilitate peer-to-peer rental and sharing, or, more broadly speaking, temporary access to goods and resources.

### The Challenge to Incumbent Firms

Sharing economy platforms challenge incumbent firms. In contrast to traditional industry dynamics of building high entry barriers and providing first mover advantages, sharing economy platforms do not need large initial investments to capture the value of direct and indirect network effects. The attraction and value of a sharing economy service increases with the number of its users—the more people who use a service the more, new, people will join in. Such effects are well known and exploited in traditional industries, a typical example being telecoms. However, network effects are at the core of sharing economy business models and value propositions; platforms rely on the self-reinforcing loop of participants on one side attracting more participants on the same and the other side. For instance, BlaBlaCar, a carpooling platform, attracts new members and creates value based on the tens of millions of its members

7 Bardhi, F. and Eckhardt, G. M. “Access-Based Consumption: The Case of Car Sharing,” *Journal of Consumer Research* (39), May 16, 2011, pp. 881-898.

8 Botsman, R. and Rogers, R. *What's Mine Is Yours. How Collaborative Consumption is Changing the Way We Live*, Harper Collins, London, 2011.

9 The notion of platforms is often, but not exclusively, used to describe digital technologies and the developments they engender. An operating system can be perceived as a platform in the sense that other software developers can build complementary applications on top of it. For instance, Microsoft offers Windows as a platform for other developers to offer their Internet browsers (e.g., Firefox, Safari, Chrome), against which Microsoft competes with its own Internet Explorer browser. Two/multi-sided refers to two or more clearly distinct groups of platform users (e.g., content providers and consumers accessing the content).

10 Hagiu, A. “Strategic Decisions for Multisided Platforms,” *MIT Sloan Management Review* (55:2), December 2013, pp.71-80.



who use their private cars to carpool with other members who, in return, share the costs of the rides. As a consequence, the focus of platforms like BlaBlaCar is on managing the participants and the communities they form (rather than on owning unique resources).<sup>11</sup> It is for this reason that we focus in this article on the coordination mechanisms that sharing economy platforms apply for strategic purposes.

Incumbent firms react to competition from sharing economy platforms in three main ways: through acquisitions (e.g., hotel operator Accor acquired Travel Keys, a platform for renting private luxury villas), through collaboration (e.g., Toyota has signed an auto-leasing deal with Uber), or through competition (e.g., local taxi companies have created mobile apps to compete with Lyft). Some key players in the car industry view the sharing economy as an opportunity to develop complementary business models (e.g., Daimler's short-term rental service car2go) and to prepare for the future of autonomous cars. Moreover, some platforms in the real-estate industry collaborate with hotels to increase the use of idle meeting rooms (e.g., LiquidSpace and Marriott), bringing some aspects of the sharing economy into a traditional B2B context.

The most contentious issue concerning sharing economy platforms is, however, whether they use irregular or even illegal means to put incumbent industries at a competitive disadvantage. In some countries, taxi drivers are protesting against Uber, which offers a similar service but does not comply with the same rules and regulations. Hoteliers from around the world complain about Airbnb for the same reasons. Furthermore, cities popular with tourists have experienced a significant reduction in the supply of rental properties and a surge in the price for long-term rentals because large numbers of landlords are now offering their rentals exclusively on Airbnb. As a result, Uber is now considered to be an illegal taxi company in some countries, and some major cities have taken legal actions to increase control over Airbnb and the grey economy of casual renting it has spawned.

## Sharing Economy Platforms Compete by Exploiting Boundary Fluidity

The main reason why sharing economy platforms gain a competitive advantage (and break rules and regulations on the way) is because they exploit the increasing fluidity of traditional organizational boundaries. We use the term "boundary fluidity" to describe the loosening of formerly strict distinctions in all organizational fields, contexts and domains, including boundaries between producer and consumer, insourcing and outsourcing, or product and service. To a significant degree, developments like crowdsourcing, open innovation and open source software, and also social media and big data, are predicated on the fluidity of organizational boundaries. Participation in a sharing economy platform is a prime example of exploiting boundary fluidity because such platforms are designed to make it relatively easy for members to casually participate in value-creation.

More specifically, sharing economy platforms operate in the fluid boundaries between markets and firms by combining organizational and market coordination mechanisms in innovative ways. Organizational coordination mechanisms used to be applied only within the boundaries of a formal organization to coordinate employees or, more broadly, formal members. In the sharing economy, these mechanisms are now applied beyond the boundaries of formal organizations to coordinate private individuals participating in sharing economy platforms. Likewise, market coordination mechanisms used to be applied outside of the boundaries of a formal organization but can now easily be brought to bear on the casual participants of a platform. (Organizational and market coordination mechanisms are described in Box 2.) As described in detail below, it is the ability to exploit boundary fluidity that enables, for instance, Uber to offer a cheaper service than taxi companies and Airbnb to offer more differentiated services than hotels.

Exploiting boundary fluidity by mixing organizational and market coordination mechanisms also raises larger social, ethical

11 Parker, G. G., Van Alstyne, M. W. and Choudary, S. P. *Platform Revolution: How Networked Markets Are Transforming the Economy—And How to Make Them Work for You*, W. W. Norton & Company, 2016.

## Box 2: Organizational and Market Coordination Mechanisms

### Organizational Coordination Mechanisms

Any group of individuals that aims at completing a complex task has to contend with two factors: specialization, which drives the division of labor for the task into subtasks, and the coordination of these subtasks to accomplish the overall task. Mintzberg distinguished six different organizational coordination mechanisms for such groups.<sup>12</sup>

1. *Mutual adjustment*: Coordination of work is made possible by a process of informal communication between people conducting interdependent work.
2. *Direct supervision*: Coordination is achieved by one individual taking responsibility for the work of others and issuing orders or instructions to others whose work is interdependent.
3. *Standardization of work processes*: Coordination is made possible by specifying the work content in rules or routines to be followed. Coordination occurs before the activity is undertaken.
4. *Standardization of output*: Coordination is obtained by communicating and clarifying the expected results of different work. The individual actions required to obtain a goal are not prescribed.
5. *Standardization of skills and knowledge*: Coordination is achieved through specified and standardized training and education. People are trained to know what to expect of each other and coordinate in an almost automatic fashion.
6. *Standardization of norms*: Norms are standardized, and socialization is used to establish common values and beliefs so people work toward common expectations.

### Market Coordination Mechanism

*Price system*: According to the market price system, price is set based on market supply and demand and contains all the information necessary for transacting.<sup>13</sup> However, there are other pricing schemes where prices are set based on the cost of service provision or as compensation to the service provider for specific efforts or outcome levels.<sup>14</sup>

and regulatory issues.<sup>15</sup> Some platform owners are heavily criticized for treating their supply-side participants unethically: the participants who drive, deliver, clean or perform other tasks are treated like quasi-employees but receive no employment benefits. Hence, the supply-side participants are left with most of the risks, such as not getting paid after service delivery, while the platform owners reap most of the benefits, such as profiting from privately owned assets with very little setup costs. Uber, for instance, unilaterally sets the prices for driving passengers

but treats the drivers like independent, self-employed users of the Uber app. There is growing evidence that supply-side participants are exploited and that the value of their labor is undermined. Indeed, the term “sharing” may become meaningless and divorced from any notions of community and solidarity, as platforms focus on selling cheaper versions of existing services, such as short-term rentals, sublets and temporary work provided by people in need of money.<sup>16</sup>

## Coordination Mechanisms Vary by Sharing Economy Model

Sharing economy platforms are successful when they exploit boundary fluidity to their advantage. The main challenge is to find the right

<sup>12</sup> Mintzberg, H. *Mintzberg on Management: Inside our strange world of Organizations*, Free Press, 1989.

<sup>13</sup> Hayek, F. A. “The Use of Knowledge in Society,” *The American Economic Review*, September 1945, pp. 519-530.

<sup>14</sup> Milgrom, P. and Roberts, J. *Economics, Organization and Management*, Prentice-Hall, 1992.

<sup>15</sup> The casual economic participation enabled by the way sharing economy platforms use boundary fluidity raises challenges for taxation and regulation. See, for instance, Katz, V. “Regulating the Sharing Economy,” *Berkeley Technology Law Journal* (30:385), November 2015, pp. 1067-1126.

<sup>16</sup> Scheiber, N. *Silicon Valley Is Ruining “Sharing” for Everybody*, *New Republic*, August 14, 2014, available at <https://newrepublic.com/article/119072/silicon-valleys-sharing-economy-airbnb-lyft-are-selling-big-lie>.

mix of organizational and market coordination mechanisms. The distinct characteristics of *Franchisers*, *Principals*, *Chaperones* and *Gardeners* models can be observed in the ways platform participation is coordinated.

Coordination mechanisms govern the interactions between participants—whether they are on the same or opposite sides of a platform. The organizational coordination mechanisms mostly aim at standardizing different aspects of the interactions. The market coordination mechanism involves different pricing schemes that incentivize the sharing or renting of privately owned resources. As depicted earlier in Figure 1, sharing economy platforms can be classified on two dimensions according to their organizational and market coordination mechanisms. Organizational coordination mechanisms determine the level of control exerted by the platform (loose vs. tight), and the market coordination mechanism determines the intensity of rivalry between supply-side participants (low vs. high).

The *control* dimension refers to the level of participants' independence in the sharing or renting of resources. Control is tight when the platform owner specifies, standardizes and monitors all those aspects of platform participation that can be used to keep the costs of transacting low. In the case of Uber, for instance, all important aspects of the ride are standardized and channeled through a single point of control—the Uber app—which controls the entire service provisioning (from matchmaking to pricing and payment).

Control is loose when the platform owner defines only minimum standards or guiding principles. In this situation, coordination is concerned with orchestrating or supporting platform participation (rather than dictating it), which can lead to increased creativity and self-motivation. In the case of Airbnb, for instance, supporting services, such as promotion seminars or professional photography, are offered to supply-side participants to help them promote their offerings.

The *rivalry* dimension relates to the degree to which a market mechanism is in place on the platform. Rivalry is high when the platform owner prices the service dynamically based on an in-house (and usually secret) algorithm that takes

account of changes in supply and demand on the platform. In this situation, the platform is run as if it was a market in which supply-side participants compete for demand-side participants. The underlying rationale, of course, is that high rivalry stimulates participants to contribute more effort to either increase service quality (e.g., Uber drivers with higher ratings will be offered more rides) or differentiate the service (e.g., Airbnb hosts offering extra services will receive more booking requests).

In contrast, rivalry is low when prices, if there are any, are based on compensating or sharing the costs of the supply side; because prices remain stable, supply-side participants compete with each other for compensation rather than for making a profit. Handy, a per-task hiring platform, sets fixed prices according to the nature of the task and the qualifications required to fulfill it. A more extreme example is Couchsurfing, a platform for peer-to-peer and free-of-charge accommodation, which prohibits monetary charges for renting out accommodation but expects participants to barter or exchange gifts.

Figure 2 provides a detailed typology of the four sharing economy models classified according to the dimensions of control and rivalry.

We now describe each of the four sharing economy models in detail. Each description is followed by a detailed account of that model's prototypical example.

### **The *Franchiser* Model—Tight Control, High Rivalry**

We use the label “Franchiser” to highlight that, in this model, the platform owner has absolute control and authority over the entire service, including the power to unilaterally dictate the price(s) for the service and to change the algorithms used to calculate the price(s). *Franchisers* exert tight control and focus on standardizing the service to increase transaction efficiency by reducing transaction costs. They achieve this by quantifying all performance indicators of the service provider. *Franchiser* platforms are set up as if they were markets for motivating high rivalry among service providers. Prices are calculated in real-time by the platform owner's algorithms based on the supply and demand on the platform, and supply-side participants compete for demand-

Figure 2: Typology of Sharing Economy Platforms by Control and Rivalry

		Control	
		Loose Minimum standards or guiding principles for platform participation are set by the platform owner	Tight Platform participation is specified, standardized and monitored by the platform owner
Rivalry	High Pricing scheme based on real-time changes in supply and demand	<p><b>Chaperones</b> Prototypical Example: <b>Airbnb</b></p> <ul style="list-style-type: none"> <li>• Value proposition: Service differentiation</li> <li>• Other examples: Homeaway, Rentomo, Apprentus</li> </ul>	<p><b>Franchisers</b> Prototypical Example: <b>Uber</b></p> <ul style="list-style-type: none"> <li>• Value proposition: Low costs and efficiency gains</li> <li>• Other examples: Lyft, Postmates, Caviar</li> </ul>
	Low Pricing scheme based on compensation of the suppliers' costs	<p><b>Gardeners</b> Prototypical Example: <b>Couchsurfing</b></p> <ul style="list-style-type: none"> <li>• Value proposition: Self-organization and community building</li> <li>• Other examples: BeWelcome, BlaBlaCar, Peerby</li> </ul>	<p><b>Principals</b> Prototypical Example: <b>Handy</b></p> <ul style="list-style-type: none"> <li>• Value proposition: Low costs and risk mitigation</li> <li>• Other examples: TaskRabbit, Zeel, Deliveroo</li> </ul>

side participants as they offer their services. *Franchisers* gain a competitive advantage by using highly standardized, codified and automated service delivery that enables them to compete based on a value proposition of low costs and efficiency gains.

The prototypical *Franchiser* is Uber (described in detail below). Other examples are Lyft, a ridesharing platform that competes with Uber in the U.S., and Postmates, a platform that matches couriers (the “postmates”) with senders of deliveries (such as restaurants or supermarkets) and their customers. During the service delivery, a postmate is told what to pick up and where to deliver it (tight control), and the price of the delivery is dictated based on supply and demand, which incentivizes postmates to compete for more profitable deliveries during peak hours (high rivalry). Another example is Caviar, a food delivery platform aimed for high-end restaurants, which instructs and orders its drivers through its app (tight control) while dynamically pricing the service based on a secret algorithm that incentivizes competition among the drivers (high rivalry).

### Uber, the Prototypical *Franchiser* Platform

Founded in 2010, Uber is a platform for matching drivers and their private cars with riders wanting to get to a destination of their choice within the same urban area. Uber dictates the fare for the ride and collects a commission fee, which is not made public but is estimated to be 20% to 30%. Operating in local markets, the service is available in 450 cities across 70 countries and provides 40 million rides per month.<sup>17</sup> Uber is predominantly competing with national and local taxi companies by offering cheaper services. Uber exerts very tight control over supply-side participants (the drivers), who are in direct competition (high rivalry) for riders and the fares set by Uber according to supply and demand.

Uber’s main coordination mechanism is a variety of rules and procedures to standardize every aspect of the service offered. Organizational experts call this “standardization of outputs”

17 Craig, S. 83 *Uber Amazing Statistics and Facts (September 2017)*, DMR, September 10, 2017, available at <http://expandedramblings.com/index.php/uber-statistics/>.



(see Box 2). In the case of Uber, the output is the service of driving a passenger from A to B, and the standardization results from the way digital technologies are used and the service quality is codified. For instance, Uber's app not only tells drivers how much to charge for a ride, but also how to get to the destination. The service quality is codified and, consequently, standardized based on the ratings given from both riders and drivers. The same 5-star scale is used to rate an individual's quality as a driver or a rider. Drivers are alerted if their ratings drop, and Uber offers tips on how to improve them. If a driver's average rating falls below a certain threshold, his or her account is deactivated. Even though the ratings on the demand side (the riders) are not as significant as on the supply side, cumulative bad rider reviews can impede getting future rides.

Pricing complements the coordination mechanism. Uber sets the price centrally by means of an automated algorithm that takes account of several variables.<sup>18</sup> For a given location, the pricing algorithm considers both historical and real-time data to predict supply and demand for different times of the day as well as for different holiday seasons and special events. When demand surpasses a certain threshold, Uber dynamically increases the prices (called surge pricing). Drivers and riders are then notified of higher prices, and inactive drivers are urged to offer their services to meet the demand. In other words, Uber incorporates supply-and-demand dynamics into its prices to coordinate driver-rider transactions. Drivers are in direct competition with each other as they aim to maximize their profits; they do this by supplying rides for higher fares during times when few other drivers are active or by offering extras, such as free water or mobile phone chargers, to get better ratings.

Uber also applies other coordination mechanisms, which are, however, not a distinct characteristic of *Franchiser* platforms. For instance, Uber has developed and codified standards and rules for drivers, which are made public to increase trust. Drivers need to have a clean driving record, and their vehicles must meet formal standards. Referred to as "standardization of skills" (see Box 2), the signals sent out by these

mechanisms help to compensate for the absence of professional certifications such as those provided by taxi licenses.

Uber's business model is a hybrid of organizational employment and market participation: drivers' actions are guided by an algorithm based on non-negotiable prices but, at the same time, they can decide for themselves when to offer their services. As the prototypical *Franchiser*, Uber exploits boundary fluidity as it mixes 1) treating the drivers like employees by standardizing their output (the organizational coordination mechanism) with 2) making them compete for fares dictated by Uber's algorithms, which takes account of current supply and demand (the market coordination mechanism).

### The *Chaperone* Model—Loose Control, High Rivalry

We use the label "Chaperone" to highlight the role of the platform owner as the watchdog and (market) overseer of the platform. *Chaperones* exert loose control over platform participants and aim to orchestrate their efforts. *Chaperone* platforms motivate high rivalry among supply-side participants. However, in contrast to *Franchisers*, which tightly control and, therefore, dictate prices based on supply and demand, *Chaperones* only loosely control the platform. Participants may, for instance, be informed by the platform owner about the current levels of supply and demand but are allowed to set their own prices. As a result, supply-side participants compete for demand-side participants. The platform gains a competitive advantage by cultivating long-term relationships with supply-side participants. The *Chaperone* model encourages supply-side participants to become competing micro-entrepreneurs and to innovate and differentiate their services and, thus, to offer value on the platform.

The prototypical *Chaperone* is Airbnb. Other examples are HomeAway, a home sharing platform run by Expedia to compete with Airbnb, and Rentomo, a platform coordinating the peer-to-peer borrowing and renting of everyday items. Beyond minimum standards set by the platform owner, Rentomo's supply-side participants decide what to offer for rent (loose control). It is also up to the participants to agree on the price for the services offered; too high a price for borrowing

<sup>18</sup> *How are fares calculated?*, Uber, available at <https://help.uber.com/h/d2d43bbc-f4bb-4882-b8bb-4bd8acf03a9d>.

a basic tool will result in little or no demand and will therefore be rejected by the market. Hence, the owners are competing by offering a cheaper or differentiated rental (high rivalry) and, as a result, add value to the platform, which can offer a vast variety of items for rent—anything from a hammer to a hospital bed. Apprentus, a platform coordinating tuition, works in the same way. The tutors are free to offer what they want (loose control) and are motivated to differentiate their offerings from other tutors to attract students (high rivalry). As a result, Apprentus is able to offer a wide variety of tuition ranging from guitar lessons to GMAT test<sup>19</sup> preparations.

### **Airbnb, the Prototypical *Chaperone* Platform**

Founded in 2008, Airbnb enables users to list and book private accommodation. The service is available in 34,000 cities spanning 192 countries, with more than 2 million listings and 60 million guests worldwide.<sup>20</sup> Airbnb charges 3% per transaction for hosts and 6% to 12% per transaction for guests. The platform competes with a diverse range of global hotel chains and local hotels, and aims to outperform incumbents through the service differentiation provided by the supply-side participants. Airbnb incentivizes hosts to innovate and introduce, for instance, unusual accommodation offerings (ranging from castles to treehouses) to the platform. Because the hosts set their own prices, they are in direct competition with each other for attracting guests.

The main coordination mechanism employed by Airbnb is “standardization of norms” (see Box 2). In contrast to Uber and Handy, which focus on supply-side rules, Airbnb manages the platform primarily through socializing its participants on how to be hospitable and, only to a lesser degree, through algorithms (like Uber) or top-down rules (like Handy). For instance, Airbnb tends to make recommendations rather than provide codified rules when it comes to safety standards, such as smoke detectors.

Airbnb suggests prices by informing the hosts about the current state of competition in the local market. Hosts usually adopt the suggested prices. The price suggested for a specific accommodation is based on data about demand and supply, as well as information about external events, such as conferences, that could increase demand. There is a high degree of rivalry between hosts, who compete with each other by providing diversified services at comparable prices to attract guests to their accommodations. For instance, hosts might charge higher prices for rare and exclusive lodgings or for offering extra amenities, such as free airport pickup or free bike rentals.

The platform also employs secondary coordination mechanisms. Most importantly, Airbnb standardizes transaction processes through a variety of standards and codified rules. For instance, booking inquiries must be answered within 24 hours, otherwise the host will be penalized with a lower response rate measure. To a much lesser degree, Airbnb standardizes and quantifies some basic aspects of the service output through peer-to-peer review and rating schemes. Guests are encouraged to write reviews and to rate their hosts on a 5-star scale in six different categories, such as cleanliness and check-in experience. These ratings are aggregated into a so-called Hospitality Index used by Airbnb to improve the matchmaking algorithm and predictive models.

Airbnb’s business model is a hybrid of community membership and market participation: it exerts loose control over the participants and recommends (rather than dictates) prices based on supply and demand. Supply-side access to the marketplace functions as a mechanism to reward appropriate behavior; i.e., the more a host adheres to the norms and values (or the higher the host’s Airbnb Hospitality Index), the more support the host receives to help him or her succeed in the marketplace (such as getting a higher ranking in the search result).

As the prototypical *Chaperone*, Airbnb exploits boundary fluidity as it mixes 1) treating the hosts like community members who are expected to follow the community norms and values (the organizational coordination mechanism) with 2) making them compete like self-employed service providers who set their own prices based on Airbnb’s recommendation algorithms, which

19 GMAT (Graduate Management Admission Test) is a computer adaptive test intended to assess certain analytical, writing, quantitative, verbal and reading skills in written English for use in admission to a graduate management program, such as an MBA. It is used by universities and business schools in the U.S. and other countries.

20 *About Us*, Airbnb, available at <https://www.airbnb.com/about/about-us>.

take account of current supply and demand (the market coordination mechanism).

### The *Principal* Model—Tight Control, Low Rivalry

We use the label “Principal” to highlight the role of the platform owner as a supervisor; a *Principal* has absolute control and authority over the platform and, in contrast to the *Franchiser* model, engages with supply-side participants by dictating the terms of short-term performance-based contracts. A *Principal* exerts tight control and focuses on standardizing the service provision by enforcing rules and by monitoring the performance of suppliers. In contrast to the *Franchiser* and *Chaperone* models, prices are based on predefined, stable categories that are not dynamically adjusted to reflect the supply and demand on the platform. Hence, there is low rivalry among supply-side participants, who may or may not vie for demand-side participants, but ultimately offer their services for compensation (rather than selling their services in a market). *Principals* gain a competitive advantage by providing incentives for supply-side participants—i.e., higher performance means higher compensation, which motivates the participants to provide high levels of effort. Hence, a *Principal's* value proposition is to compete on lower costs through tight control and to mitigate the risk of opportunistic behavior in service provision.

The prototypical *Principal* is Handy. Other examples are TaskRabbit, a per-task hiring platform and Handy's competitor, and Zeel, which coordinates and books standardized massage packages, for which it charges a standard price. The therapist providing the massage service has no say in the packages offered or the price. The price is determined by the therapist's certified qualifications rather than real-time supply and demand (low rivalry). Similarly, Deliveroo, a platform that coordinates couriers and restaurants for the delivery of food, tightly controls the couriers in terms of how and what to deliver and, in contrast to Postmates, charges a standard fee.

### Handy, the Prototypical *Principal* Platform

Founded in 2012, Handy facilitates the hiring of per-task workers (referred to as “pros”) for cleaning jobs and, to a lesser degree, other domestic services, such as plumbing work or assembling furniture. The platform operates in 28 cities across the U.S., Canada and the U.K.,<sup>21</sup> offering the services of about 10,000 pros.<sup>22</sup> Fees, estimated to be between 10% and 15% per task, are paid to Handy for every transaction. Handy competes against a service industry characterized by local businesses of many different sizes. The platform aims at cost-efficiency by reducing coordination costs, which are typically caused by uncertainty about the quality of service provision and risks, for instance, of shirking. Handy exerts tight control over the participants to reduce the chances of low-quality service provision and offering monetary incentives to motivate providers to improve their services.

The main coordination mechanism employed by Handy is to control the supply-side participants (the pros) by standardizing how they do their jobs. Organizational experts call this “standardization of work processes” (see Box 2). The pros are managed with tight control by the platform owner—which provides obligatory training sessions, and extensive checklists, advises on the type of supplies to use and clothes to wear, and provides detailed guidelines on how to interact with the customers. Thus, Handy focuses on specifying and programming the contents of work to standardize the cleaning process and to mitigate the risks of low-quality outcomes. The outcomes are quantified by Handy's rating system, which measures a customer's overall satisfaction with the service provided.

Handy provides a price quotation for each service request, which is then matched with potential service providers. This pricing scheme is designed to incentivize service providers to maintain a certain level of quality and to

21 Lawler, R. *Handybook Rebrands As Handy In An Effort To Become Amazon For Home Services*, TechCrunch, September 16, 2014, available at <https://techcrunch.com/2014/09/16/handybook-rebrands-as-handy>.

22 Griswold, A. “Dirty Work,” Slate.com, July 24, 2015, available at [http://www.slate.com/articles/business/moneybox/2015/07/handy\\_a\\_hot\\_startup\\_for\\_home\\_cleaning\\_has\\_a\\_big\\_mess\\_of\\_its\\_own.html](http://www.slate.com/articles/business/moneybox/2015/07/handy_a_hot_startup_for_home_cleaning_has_a_big_mess_of_its_own.html).

complement the numerous measures used to standardize the work processes. The quoted price is tightly related to the pros' performance records. For instance, prices for services in the so-called "Rolling Tiers" are determined by the pros' performance ratings from the last 28 days. The price also depends on the complexity of the job and is increased if it requires a certified professional, such as a plumber or electrician. The pricing scheme rewards quality work with higher compensation. As a result, market dynamics are hardly present and rivalry among the pros is low—that is, they are only in direct competition for the tasks offered and tendered for on the platform. However, Handy does not adjust the prices in real-time to reflect supply and demand on the platform, nor are the pros allowed to make counter-offers for tendered tasks (which would be the case when, for instance, auctioning the tendered tasks).

As with the other prototypical platforms described above, Handy's standardization of work processes is complemented by other, minor coordination mechanisms. In this case, the main complementary mechanism is standardization of outputs, which derives from performance-related penalties. For example, the pros are fined for a no-show and for arriving more than 30 minutes late for a job. These penalties are outlined in the "Service Professional Agreement" that all Handy service providers are required to sign.<sup>23</sup> Sanctions are also applied to users who cancel service bookings.

Handy's approach is a hybrid of organizational employment and independent contracting. As the prototypical *Principal*, Handy exploits boundary fluidity as it mixes 1) treating the pros like employees by standardizing work processes (the organizational coordination mechanism) with 2) making the pros participate in tenders based on terms and standardized prices dictated by Handy (the market coordination mechanism).

### **The Gardener Model—Loose Control, Low Rivalry**

We use the label "Gardener" to highlight that, in this model, the role of the platform owner is to cultivate communities by providing an infrastructure with a minimum amount of

<sup>23</sup> *Service Professional Agreement*, Handy, available at [https://www.handy.com/pro\\_terms](https://www.handy.com/pro_terms).

standardization. *Gardeners* exert loose control over the participants and aim to orchestrate their efforts to self-organize. Prices are not dynamically adjusted to reflect supply and demand but rather are based on predefined, stable categories. Hence, a *Gardener* fosters low or even no rivalry among the supply-side participants—they primarily offer their services for compensation, while vying for demand-side participants is secondary or even irrelevant. *Gardeners* gain a competitive advantage from the participants' active involvement in the community and their intrinsic motivation to voluntarily contribute to the coordination, governance and even development of the platform, which relieves the platform owner of many of these responsibilities.

The prototypical *Gardener* is Couchsurfing. Other examples are BeWelcome, an open source version of Couchsurfing, and the BlaBlaCar carpooling platform. Beyond minimum standards, such as safety, BlaBlaCar only orchestrates and supports carpooling without intervening in the service delivery. Furthermore, the drivers are not allowed to make a profit and can only ask for a share of the costs. (Hence, the *Gardener* model does not necessarily mean there is no money involved in the transaction.) BlaBlaCar offers a cost calculation, which can be modified by the driver only within predefined limits set by BlaBlaCar. The drivers are therefore not competing with each other for business from the demand side. Another *Gardener* example is Peerby, a platform that allows users to share household items and tools for free. Participants can share whatever they want as long as minimum standards are not violated (loose control) and shared items are gifted rather than rented (low rivalry).

### **Couchsurfing, the Prototypical Gardener Platform**

Founded in 2003 as a non-profit organization, Couchsurfing coordinates peer-to-peer, short-term and free-of-charge accommodation. Until its incorporation in 2011, the service was almost exclusively run collectively by member communities.<sup>24</sup> Having attracted about 12 million users, revenues are now based on a "freemium"

<sup>24</sup> Marton, A., Constantiou, I. and Lagoudakos, G. "Openness and Legitimacy Building in the Sharing Economy: An Exploratory Case Study about CouchSurfing," in *Proceedings of the 50th Hawaii International Conference on System Sciences*, 2017.



model,<sup>25</sup> and no commission fees are collected. Targeting primarily young people, Couchsurfing can be viewed as a competitor to youth hostels, offering an alternative service by cultivating a user community and allowing supply-side members to offer differentiated services. Couchsurfing exerts loose control over the supply side with low rivalry between suppliers; hosts are not allowed to charge for their accommodation. Platform participants are expected to cooperate as members of a community instead of making a profit from, and competing against, each other.

The interaction between the supply and demand side of the platform—the hosts and the “couch surfers”—is largely left to the participants themselves. There is little to no formalized interaction, as it is up to the specific host and surfer to agree on the terms of the stay. This coordination mechanism, known as “mutual adjustment” (see Box 2) in the literature, takes place between the members “sharing a couch.” In other words, each stay is negotiated on a case-by-case basis with little or no reference to standards or regulations. Apart from being free of charge, the variety and serendipity that this kind of mutual adjustment generates is a key attractor of the platform.

As Couchsurfing does not use prices to coordinate the exchange between its participants, they are engaged in an interaction akin to a barter or gift economy. The couch surfer is expected to express gratitude for a free stay and, maybe, provide a helping hand as a counter-gift. Sometimes, a host may offer to take the surfer out to a local bar for an authentic local experience or ask the surfer to cook a dinner during the stay. Thus, the negotiation and mutual adjustment are aligned with the platform’s focus on cultivating a no-competition and non-profit culture among the hosts, who expect gifts or favors as a symbolic, rather than monetary, share of the costs.

Couchsurfing’s secondary coordination mechanism is standardization of norms. Similar to, but not as focused as Airbnb, Couchsurfing promotes cultural values of cosmopolitan openness and the norms of hospitality. To a lesser extent, there are some mechanisms for standardizing the work processes based on a

peer-to-peer reputation system. However, the references and reviews by and about surfers and hosts consist only of brief descriptions and a rudimentary rating scheme.

Couchsurfing’s approach is a hybrid of community membership and a gift economy. As the most hands-off platform owner of the four prototypes, Couchsurfing does not dictate what the participants should do (loose control) but sets minimum standards and general taboos for the community. As the prototypical *Gardener*, Couchsurfing exploits boundary fluidity as it mixes 1) leaving it to the participants to coordinate by mutual adjustment (the organizational coordination mechanism) with 2) eliminating rivalry among the hosts by prohibiting prices and expecting participants to exchange gifts instead (market coordination mechanism).

## Comparison of the Four Prototypical Platforms

Uber, Airbnb, Handy and Couchsurfing are prototypical examples of the four models because they demonstrate very distinctively the different configurations of organizational and market coordination mechanisms according to the two dimensions of control and rivalry. Table 1 provides a general comparison of these four prototypical platforms.

### Coordination Mechanisms

Each prototypical example uses a different organizational coordination mechanism. Uber’s main coordination mechanism is standardization of outputs, which specifies key aspects of the service and results in a commoditized service. Uber exercises a high degree of control over the service providers (drivers). Handy’s main organizational coordination mechanism is standardization of work processes, which is rooted in the need to minimize uncertainties about service quality and results in a high degree of managerial oversight of the supply-side participants. What Uber and Handy have in common is that they exert tight control over supply-side participants.

Airbnb’s main organizational coordination mechanism is the standardization of norms for hospitality, which motivates hosts to provide

<sup>25</sup> The freemium business model works by offering basic services for free; users pay a premium for more advanced or additional features.



**Table 1: General Comparison of Uber, Handy, Airbnb and Couchsurfing**

	<b>Uber</b>	<b>Airbnb</b>	<b>Handy</b>	<b>Couchsurfing</b>
<b>Model</b>	<i>Franchiser</i> <ul style="list-style-type: none"> <li>• Tight Control</li> <li>• High Rivalry</li> </ul>	<i>Chaperone</i> <ul style="list-style-type: none"> <li>• Loose Control</li> <li>• High Rivalry</li> </ul>	<i>Principal</i> <ul style="list-style-type: none"> <li>• Tight Control</li> <li>• Low Rivalry</li> </ul>	<i>Gardener</i> <ul style="list-style-type: none"> <li>• Loose Control</li> <li>• Low Rivalry</li> </ul>
<b>Main competition</b>	Taxi companies, other ridesharing platforms	Hotels, short-term rental companies	Cleaning companies	Youth hostels
<b>Geographic regions of operation</b>	Global (but illegal in some countries)	Global	U.S., Canada, U.K.	Global
<b>Supply-side participants</b>	Drivers—individuals with cars	Hosts—individuals with under-used living space	Cleaners (“pros”)—individuals capable of performing tasks	Hosts—individuals willing to accommodate guests (“surfers”) for free
<b>Platform slogan</b>	<i>“Evolving the way the world moves”</i>	<i>“Belong Anywhere”</i>	<i>“Handy helps you get your home in order”</i>	<i>“Share your life”</i>

value-added services and thus enables service differentiation. The value of the Airbnb platform is not based primarily on providing access to low-cost accommodation but on offering properties that the accommodation industry cannot. Hence, the relationship between platform owner and platform participants is more like a partnership. In contrast, Couchsurfing’s main organizational coordination mechanism is mutual adjustment between the members rooted in the community focus of the platform. In this case, coordination is delegated to the participants themselves. Host and surfer negotiate the terms of the gift exchange without the intervention of the platform owner. Hence, what Airbnb and Couchsurfing have in common is that they exert loose control over their supply-side participants.

**Pricing Schemes**

The four prototypical platforms employ a variety of pricing schemes. Couchsurfing charges a subscription fee for premium services. Airbnb recommends prices for renting accommodation based on supply and demand. Handy’s prices are set according to different versions of the same service. Uber’s prices are set by the platform based on the current levels of supply and demand.

The main distinction between the platforms is how they determine prices and whether the pricing scheme incentivizes supply-side participants to compete among themselves. In this respect, Uber and Airbnb are comparable; both base the price of the service on real-time levels of supply and demand, and their supply-side participants compete for higher prices and more customers by offering, for instance, better quality services or differentiated value. As a result, there is high rivalry among the supply-side participants.

In contrast, Handy and Couchsurfing rely on compensating the suppliers’ costs (and not on real-time pricing based on supply and demand). Thus, with both of these platforms, there is low rivalry among supply-side participants. Handy sets the price based on compensating the supplier for the expected quality of work (i.e., a tendered contract), and Couchsurfing sets no price at all by motivating participants to symbolically share in the costs (e.g., by providing a gift). The difference between these two platforms is that Handy aims at cost-efficiencies (hence the tight control of suppliers), while Couchsurfing aims at reaching a critical mass of participants (hence the loose

control), with the hope that, in the future, it can “monetize” the community.

The organizational and market (pricing) coordination mechanisms used by the four prototypical platforms are summarized in Table 2.

### Lessons Learned

Regardless of whether a company operates a sharing economy platform or is running a traditional business, it is necessary to understand how sharing economy platforms work. In particular, incumbent firms need to understand the underlying logic that creates both new challenges and new opportunities for competing either in or against the sharing economy. Sharing economy platforms use business models that do not require them to possess the same

amount of resources and assets as traditional businesses. These platforms therefore have greater flexibility in adapting their strategies to environmental changes and exploiting new business opportunities, which increases the competition for incumbents. The leading sharing economy platforms’ technological mastery and data proficiency position them well to explore future opportunities. Uber, for instance, is helping to advance the development of autonomous cars, which would enable Uber to further exploit its extensive datasets about private transportation behavior.<sup>26</sup>

<sup>26</sup> This is a good example of how sharing economy businesses are first and foremost competing in the data economy. See, for instance, “Data is giving rise to a new economy,” *The Economist*, May 6, 2017, available at <https://www.economist.com/news/briefing/21721634-how-it-shaping-up-data-giving-rise-new-economy>.

**Table 2: Organizational and Market (Pricing) Coordination Mechanisms Used by Uber, Airbnb, Handy and Couchsurfing**

	Uber	Airbnb	Handy	Couchsurfing
<b>Main Organizational Coordination Mechanism</b>	Standardization of outputs  e.g., Uber app, performance index and ratings on both sides	Standardization of norms  e.g., explicit norms of hospitality for both sides	Standardization of work processes  e.g., obligatory training, standard work clothes for supply side	Mutual adjustment  e.g., cooking a dinner in return for a free stay
<b>Main Market Coordination Mechanism</b>	Price set by platform owner based on supply and demand  e.g., Price surging	Price recommended by platform owner (set by host)  e.g., Higher prices for exotic accommodations	Price set by platform owner based on expected quality of work  e.g., Rolling Tiers	No prices, but symbolic compensation of costs  e.g., Gift exchange
<b>Complementary Organizational Coordination Mechanism</b>	Standardization of skills  e.g., Driver’s license	Standardization of work processes  e.g., Requirement to answer booking requests within 24 hours	Standardization of outputs  e.g., Ratings, penalties	Standardization of norms  e.g., Norms and values of cosmopolitan openness
<b>Exploitation of Boundary Fluidity</b>	Mix of employment and self-employment	Mix of community membership and self-employment	Mix of employment and independent contracting	Mix of community membership and gift exchange

Below, we set out five lessons from our study of sharing economy platforms. These lessons will help executives in traditional businesses better understand the challenges and opportunities provided by the sharing economy.

### **Lesson 1: Understand the Strategic Intent of Sharing Economy Platforms**

The starting point should be to analyze the sharing economy models of existing or potential competitors and partners to understand how they facilitate peer-to-peer sharing or renting of privately owned idle resources. Determine how the platform owners configure organizational and market coordination mechanisms and how they exert control over platform participants and promote rivalry among them. Our four sharing economy models (*Franchisers*, *Principals*, *Chaperones* and *Gardeners*) will help in this process because they reflect strategic intent rather than technical platform operations.

This analysis can be done relatively quickly and will provide an overview of the competitive landscape. Once the sharing economy competitors have been categorized according to the four models the strategic intent of each competitor becomes clear. A *Franchiser* will focus on offering competitive prices to attract a critical mass of users and to compete against incumbent players, with innovation coming from the platform owner rather than the participants. A *Chaperone* will focus on motivating participants to innovate and increase the variety of offerings, and thus create differential value. A *Principal* will compete based on low prices and centralized innovation. Unlike a *Franchiser*, however, a *Principal* will gain a competitive advantage by reducing the uncertainty about the quality of the service. Finally, a *Gardener* will attract a community of enthusiasts who will engage in improving the platform and in creating innovative services.

Note, however, that a sharing economy platform may offer different services based on different models. Uber, for instance, is offering a genuine car-pooling service (uberPOOL) in selected areas. uberPOOL operates according to the *Gardener* model, matching drivers with passengers going to the same destination and who are willing to share the costs of the ride. Moreover, sharing economy platforms may

switch from one model to another. TaskRabbit, for instance, moved from the *Chaperone* model (initially, tasks were auctioned off to bidding supply-side participants) to the *Principal* model, not unlike that of Handy, its main competitor. Executives of traditional businesses therefore need to frequently reanalyze sharing economy platforms that compete in their industry.

### **Lesson 2: Complement Your Product Portfolio with Services**

To compete against the sharing economy, it may not be necessary or even possible for a business to create its own sharing economy platform. The important issue here is to recognize that the key characteristic of the new business environment is boundary fluidity, particularly between products and services, which gives rise to the concept of “servitization.”<sup>27</sup>

With servitization, a manufacturing business can engage in similar business practices as sharing economy platforms, but without having to rely on idle private resources. Sharing economy platforms “servitize” private assets and have no involvement in traditional product sales. Complementing existing product portfolios with related services is therefore an effective countermeasure that businesses can take against existing or potential sharing economy competitors. As mentioned earlier in this article, incumbent car manufacturers, for example, are exploring these types of services. Some have decided to collaborate with sharing economy platforms (e.g., Toyota), while others have created their own platforms and servitize their cars by offering short-term rental services rather than selling them. To find ways of competing with Uber and Lyft, Daimler is experimenting with renting out free-floating fleets of its own cars via its car2go app. BMW is doing the same with its DriveNow mobility concept.

### **Lesson 3: Access New Modes of Innovating**

Executives in incumbent firms should consider if they can exploit boundary fluidity to gain access to new sources of innovation. The traditional model of innovating is to set up a dedicated

<sup>27</sup> The term servitization is used to describe the transformation of a business to compete through a combination of services and products, rather than products alone.

R&D department. However, in the same way that *Chaperone* and *Gardener* platforms (such as Airbnb or Couchsurfing) encourage their participants to be innovative, incumbent firms can set up platforms for engaging outsiders in open innovation and crowdsourcing. A prime example is LEGO Ideas, where the LEGO Group invites enthusiasts outside the formal organization to submit and vote on ideas for new product lines.<sup>28</sup> A similar approach has become a standard practice in the gaming industry, with producers of computer games inviting players to come up with their own “mods” (i.e., modifications to the games) and to share them with the gaming community.

Incumbents can use the logic of the sharing economy to build new innovation platforms or to partner with existing ones. Rather than sharing idle resources, such as living spaces, car seats, skills or couches, the idle resources being harnessed are the creativity, ingenuity and time of private individuals.

Our four sharing economy models can guide the design of an innovation platform or the decision with whom to partner. In particular, the loose control of the *Gardener* and *Chaperone* models is consistent with serendipitous innovation and exploration. For instance, open source software is based on communities run by *Gardeners*, while crowdfunding platforms are typically run like markets by *Chaperones* (see also the example of PatientsLikeMe in Lesson 4). In contrast, the tight control exercised by *Principals* is appropriate for incremental innovation with clearly defined and specified goals. Thus *Principals* might run innovation competitions with fixed monetary rewards. The *Franchiser* model, however, does not lend itself to open and serendipitous innovation. Everything, including innovation, is centralized in this model. Hence, organizations lacking the resources to hire the necessary talent should not imitate Uber (with its considerable financial muscle), when it comes to innovation.

## Lesson 4: Engage Consumers in Value Creation

Successful sharing economy platforms gain a competitive advantage by engaging their participants to create value for them. Such an approach can be useful for traditional firms as well. They should consider how to involve consumers or clients more closely by increasing the value of network effects, whether on the same side or both sides of a platform. PatientsLikeMe provides an example. This online community enables people suffering from chronic diseases to self-report their health conditions. Patients join the community to connect with each other to exchange practical tips and to create support communities (same-side network effects). The data they provide to the platform is used to discover possibilities for new experiments and the development of new treatments by medical researchers and the pharmaceutical industry (cross-side network effects). PatientsLikeMe is one example of how businesses can engage with platform participants in a variety of ways to tap into new sources of value-generation.

However, effectively engaging consumers in this way requires a shift in strategic intent, away from competing based on the ownership of unique assets, to generating (and capturing) value based on user participation and community engagement. In turn, this shift will foster innovation (as discussed in Lesson 3). Because the role of consumers or users becomes central, an organization must carefully consider whether it will exercise tight or loose control over platform participants and whether it will motivate high or low rivalry among supply-side participants.

These are important factors to consider even if the business does not choose to operate a sharing economy platform itself. The boundaries of the organization will become more fluid, and the business must be prepared to exploit that fluidity as a strategic asset.

28 El Sawy, O., Amsinck, H., Kræmmergaard, P. and Vinther, A. L. “How LEGO Built the Foundations and Enterprise Capabilities for Digital Leadership,” *MIS Quarterly Executive* (15:2), June 2016, pp. 141-166.

## Lesson 5: Ensure Strategic Fit by Optimizing the Combination of Organizational and Market Coordination Mechanisms

Operating a successful sharing economy platform requires a hybrid business model designed to mix and match coordination mechanisms. As described earlier, the key dimensions are control (loose vs. tight) and rivalry (high vs. low). The strategic positioning along these two dimensions is crucial because it ultimately determines how participants will be motivated to join the platform, remain active and, ultimately, create value.

Hence, the main consideration when establishing a sharing economy platform is how the platform owner facilitates and benefits from peer-to-peer sharing or renting of privately owned idle resources. More specifically, what is being shared on the platform (e.g., assets, labor or knowledge)?, what is the value proposition (e.g., cost efficiency or service differentiation)? and what is the optimum configuration of organizational and market coordination mechanisms? All these issues need to be considered in terms of strategic positioning and reflected in the business model.

As a starting point, a firm can use our four sharing economy models to design a business model that is aligned with the firm's strategy. In the process of doing this, differences between being a "traditional" firm and an owner of a sharing economy platform will become evident. Ultimately, the goal is to devise a sharing economy model that fits the business and the organizational structure of the firm.

## Concluding Comments

In this article, we have demonstrated how sharing economy platforms combine economic resources and management tools in innovative ways. As a result, they can gain a competitive advantage over incumbent firms because they follow the logic of multi-sided platforms rather than traditional business models. We have encapsulated that logic in four models of sharing economy platforms—*Franchiser*, *Principal*, *Chaperone* and *Gardener*. Each model represents a distinct combination of control over and rivalry among participants, leading to particular

competitive advantages. These models, and the descriptions of the corresponding prototypical examples, will help managers and businesses gain a more comprehensive understanding of the sharing economy and make important strategic decisions on how to approach the sharing economy. Ultimately, businesses will need to decide whether to compete against the sharing economy or in the sharing economy. Not competing at all is not an option.

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## Appendix: Research Methodology

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Our research on the sharing economy, parts of which are presented in this article, is based on case studies of sharing economy services and platforms included in a database that we are in the process of building (currently, the database includes details of 37 sharing economy platforms—see table below).

To date, we have assembled comprehensive in-depth case studies of six of these platforms—Airbnb, Uber, Handy, Couchsurfing, Lyft and TaskRabbit. There is a rich body of empirical data available for in-depth analysis for each of these popular, high-profile platforms. We then carried out a cross-case analysis of these platforms and created typologies of their models, business practices and strategic developments, based on their commonalities and differences. Finally, we checked and further modified the typologies by drawing on the details of the other 31 platforms in our database.

The data we collected about the sharing economy platforms came from online sources. First, we looked at tech blogs accessed via the "Techmeme" aggregator, which we regard as a reliable source of information because of 1) its relevance—many blogs report on actions concerning sharing economy platforms, 2) its quality—we were able to validate data obtained from multiple blogs and online corporate sources, and 3) its flexibility provided by quick data searches, access and filtering. Second, we collected data from the platform owners' websites and blogs, as well as online video presentations and interviews by their top managers. These sources provided rich narratives about sharing economy platforms from the companies' perspectives.



Sharing Economy Platforms Currently in Our Database

Platform Name	Industry and main competition	Geographic regions of operation	Supply-side participants	Model
Airbnb	Accommodation: Hotels, short-term rental companies	Global	Hosts, i.e., individuals with under-used property	<i>Chaperone</i>
Apprentus	E-learning platforms, private schools, e.g., sports, programming, languages	Global	Teachers, i.e., yoga, school support, music and language lessons	<i>Chaperone</i>
Barqo	Boat rentals	Europe	Boat owners	<i>Chaperone</i>
Eatwith	Restaurants	Global	Home chefs and food entrepreneurs	<i>Chaperone</i>
Gomore	Transportation, car leasing companies	Europe	Car owners, i.e., individuals willing to rent out their car	<i>Chaperone</i>
Homeaway	Vacation rental businesses, hotels, short-term rental companies	Global	Hosts, i.e., individuals with under-used property	<i>Chaperone</i>
Rentomo	Online/local marketplace	India	Owners, i.e., individuals willing to rent out everyday items such as drills, cameras, bikes	<i>Chaperone</i>
RVshare	Recreational vehicle (RV) rental companies	Global	RV owners willing to rent out their vehicles	<i>Chaperone</i>
ShareMyStorage	Storage companies	U.K.	Storage owners, i.e., individuals willing to rent out spare space	<i>Chaperone</i>
SpareHire	Recruitment companies, business consultants	U.S.	Freelance business professionals	<i>Chaperone</i>
Spothero	Parking companies	U.S.	Car park owners, i.e., individuals with parking space	<i>Chaperone</i>
Turo	Transportation, car leasing companies	U.S.	Car owners, i.e., individuals willing to rent out their cars	<i>Chaperone</i>
Zilok	Car rental companies, online/local marketplaces	Europe, U.S.	Owners, i.e., individuals willing to rent out their cars and everyday items such as drills, cameras, bikes	<i>Chaperone</i>
Caviar	Food delivery	U.S.	Drivers, i.e., individuals with cars, scooters, bikes	<i>Franchiser</i>
Lyft	Taxi companies, other ridesharing platforms	U.S.	Drivers, i.e., individuals with cars	<i>Franchiser</i>
OLA	Taxi companies, other ridesharing platforms	India	Taxi drivers	<i>Franchiser</i>
Postmates	Delivery companies	U.S.	Drivers, i.e., individuals with cars, scooters, bikes	<i>Franchiser</i>
Uber	Vehicle hire: Taxi companies, other ridesharing platforms	Global	Drivers, i.e., individuals with cars	<i>Franchiser</i>

## Four Models of Sharing Economy Platforms

Platform Name	Industry and main competition	Geographic regions of operation	Supply-side participants	Model
BeWelcome	Hotels, short-term rental companies	Global	Hosts, i.e., individuals willing to accommodate guests for free	<i>Gardener</i>
BlaBlaCar	Transportation, taxi companies, other ridesharing platforms, tourist services	Europe, Russia, Turkey, Mexico, Brazil, India	Car owners, i.e., individual drivers with empty seats	<i>Gardener</i>
Couchsurfing	Accommodation rental: Youth hostels	Global	Hosts, i.e., individuals willing to accommodate guests for free	<i>Gardener</i>
Freecycle	Online/local marketplaces	Global	Individuals giving stuff for free for reuse and recycling	<i>Gardener</i>
Grannaker	Online/local marketplaces	Sweden	Owners, i.e., individuals willing to borrow or rent out everyday items such as drills, cameras, bikes	<i>Gardener</i>
Peerby	Online/local marketplaces	Europe, U.S.	Owners, i.e., individuals willing to borrow everyday items such as drills, cameras, bikes	<i>Gardener</i>
Shareyourmeal.net	Online cooking platforms	Europe, U.S.	Cooks, i.e., individuals, amateur cooks	<i>Gardener</i>
Buddytruk	Delivery companies	U.S.	Individuals with pick-up trucks	<i>Principal</i>
Deliveroo	Companies marketing, selling and delivering restaurant meals	Europe, Australia, Hong Kong, Singapore, United Arab Emirates	Delivery drivers, i.e., individuals owning a vehicle	<i>Principal</i>
Getmaid	Cleaning companies	U.S. (New York)	Individuals providing domestic services	<i>Principal</i>
Handy	Domestic cleaning	U.S. (New York)	Individuals providing domestic services	<i>Principal</i>
Poppy	Daycare schools	U.S.	Caregivers, babysitters	<i>Principal</i>
REV	Companies providing transcription, caption and translation services	Global	Freelancers, i.e., translators	<i>Principal</i>
Soothe	Spa, massage resort companies	U.S.	Massage therapists	<i>Principal</i>
TaskRabbit	Cleaning, delivery, moving and handyman companies	U.S., U.K. (London)	Individuals performing tasks	<i>Principal</i>
Trusted	Babysitter companies	U.S. (San Francisco, New York)	Babysitters, child care providers	<i>Principal</i>

Platform Name	Industry and main competition	Geographic regions of operation	Supply-side participants	Model
Upwork	Recruitment companies	Global	Freelancers	<i>Principal</i>
WumDrop	Courier companies, postal service	South Africa	Freelance drivers	<i>Principal</i>
Zeel	Spas, massage resorts	U.S.	Massage therapists	<i>Principal</i>

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